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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KNABLE, GEOFFREY L

ART UNIT	PAPER NUMBER
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1733

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DATE MAILED: 06/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/742,080

Applicant(s)

AOKI ET AL.

Examiner

Geoffrey L. Knable

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-- **Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kato et al. (US 5,083,596) or Groezinger et al. (US 4,620,580).

Kato et al. discloses a tire mounted on a rim and including 5-95% by volume of a liquid, preferably water, within the tire cavity – not esp. col. 1, line 65 – col. 3, line 6.

Such would have been reasonably expected to inherently possess a capability of

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irregularly changing the area as claimed, particularly in light of applicant's disclosure that would indicate water to be effective. Groezinger et al. likewise discloses inclusion of a liquid within a tire cavity to partially fill the cavity – note esp. fig. 2, such likewise being reasonably expected to possess a capability for changing cross-sectional area with rotation as claimed.

5. Claims 1, 6, 7 and 8 are rejected under 35 U.S.C. 102(e) as anticipated by Nishikawa (US 6,343,843).

Nishikawa discloses a tire mounted on a rim and including a liquid foaming/surfactant material partially filling the cavity to damp noise – note esp. figs. 5-6 and col. 3, lines 44+. A foam stabilizer is also suggested.

6. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

7. Claims 1-5 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Pace (US 3,361,698).

Pace discloses a tire/rim including a liquid partially filling the tire cavity – fig. 1. Although the reference does not indicate whether the material is capable of irregularly changing the area as claimed, being a flowable liquid, it is submitted that reasonable basis exists to expect that this material would be capable of irregularly changing the area with rotation (at least at some rotational speeds) as claimed so as to teach or render obvious what is presently claimed, the burden properly shifting to applicant to show or establish that the teaching of this reference would not teach or render obvious a tire/rim

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system that meets the present claims. As to claims 2-5, various elastomer and/or polymer materials may be dispersed in liquid – note esp. col. 8, lines 10+.

8. Claims 1, 2, 4 and 6-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hicks (US 2,797,721).

Hicks discloses a tire including 35-65% of a liquid tire ballast within the tire interior chamber. Although the reference does not indicate whether the material is capable of irregularly changing the area as claimed, being a flowable liquid, it is submitted that reasonable basis exists to expect that this material would be capable of irregularly changing the area with rotation (at least at some rotational speeds) as claimed so as to teach or render obvious what is presently claimed, the burden properly shifting to applicant to show or establish that the teaching of this reference would not teach or render obvious a tire/rim system that meets the present claims. As to claims 2 and 4, various polymer materials (e.g. cornstarch, glue, polyvinyl alcohol) may be mixed/dispersed in liquid. As to claims 6-8, note that the reference indicates that a “frothy liquid” forms, this being reasonably termed a foaming or foamable material. Note also that stabilizers as well as soaps (this being considered to suggests surfactants) are discussed (col. 4, lines 34-37).


9. Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks (US 2,797,721) or Nishikawa (US 6,343,843) as applied to claims 1 and 6-8 above, and further in view of EP 753420 to Gerresheim et al.

The primary references do not indicate how the liquids are to be introduced into the tire. It however is considered that the ordinary artisan would have been able to select an appropriate means to introduce the liquid materials into the tires, it being further noted that utilizing a pressure source in combination with a container for the material is a well known, conventional and obvious way to introduce a liquid material into a tire – EP '420 is merely exemplary (note figs. 1-2).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 703-308-2062. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Geoffrey L. Knable  
Primary Examiner  
Art Unit 1733

G. Knable  
June 10, 2002